

SALT LAKE CITY, UT 84111

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE 10/661,200 09/12/2003 Steve Klotz 15436.252.1.1 EXAMINER 10/16/2006 22913 **WORKMAN NYDEGGER** MASKULINSKI, MICHAEL C (F/K/A WORKMAN NYDEGGER & SEELEY) ART UNIT PAPER NUMBER **60 EAST SOUTH TEMPLE** 1000 EAGLE GATE TOWER 2113

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary		
	10/661,200	KLOTZ ET AL.
	Examiner	Art Unit
The MAILING DATE of this communication ap	Michael C. Maskulinski	2113
Period for Reply	pears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING ID. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be to select the select that the select the select that	DN. timely filed m the mailing date of this communication. IED (35 U.S.C. § 133).
Status		·
1) ☐ Responsive to communication(s) filed on 12 S 2a) ☐ This action is FINAL . 2b) ☐ This 3) ☐ Since this application is in condition for allowed closed in accordance with the practice under	s action is non-final. ance except for formal matters, p	
Disposition of Claims	•	
4) Claim(s) 1-22 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) 1-15 and 17-21 is/are rejected. 7) Claim(s) 16 and 22 is/are objected to. 8) Claim(s) are subject to restriction and/o Application Papers 9) The specification is objected to by the Examination The drawing(s) filed on 12 September 2003 is/Applicant may not request that any objection to the	er. dere: a)⊠ accepted or b)□ objected drawing(s) be held in abeyance. See	ee 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	· · · · · · · · · · · · · · · · · · ·	
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applica prity documents have been receiv nu (PCT Rule 17.2(a)).	tion No ved in this National Stage
Attachment(s) Notice of References Cited (PTO-892)	4) ☐ Interview Summar	v (PTO-413)
Notice of References Cited (PTO-052)* Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 1/30/04.	Paper No(s)/Mail I 5) Notice of Informal 6) Other:	Date

Art Unit: 2113

Non-Final Office Action

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 3, 10, 13, 17, 18, 20, 21, and 22 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 5, 9, 11, 14, 16, 17, and 18 of copending Application No. 10/661,705.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim(s) 1, 2, 5, 9, 11, 14, 16, 17, and 18 of Application no. 10/661,705 contain(s) every element of claim(s) 1, 3, 10, 13, 17, 18, 20, 21, and 22 of the instant application and as such anticipate(s) claim(s) 1, 3, 10, 13, 17, 18, 20, 21, and 22 of the instant application.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 2, 5, 9, 11, 14, 16, 17, and 18 of the copending application includes all of the limitations in claims 1, 3, 10, 13, 17, 18, 20, 21, and 22 of the instant application. With regard to the additional limitations in claims 1, 2, 5, 9, 11, 14, 16, 17, and 18 of the copending application, which are not included in claims 1, 3, 10, 13, 17, 18, 20, 21, and 22 of the instant application, the omission of these limitations in claims 1, 3, 10, 13, 17, 18, 20, 21, and 22 of the instant application is an obvious expedient since the remaining limitations in claims 1, 2, 5, 9, 11, 14, 16, 17, and 18 of the copending application perform the same function as the limitations in claims 1, 3, 10, 13, 17, 18, 20, 21, and 22 of the instant application (*In re Karlson*, 136 USPQ 184 (CCPA 1963)).

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claims 1 and 3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 7, 8, 9, 12, 14, and 16 of copending Application No. 10/661,907. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 7, 8, 9, 12, 14, and 16 of the copending application includes all of the limitations in claims 1 and 3 of the instant application. With regard to the additional limitations in claims 7, 8, 9, 12, 14, and 16 of the copending application, which are not included in claims 1 and 3 of the instant application, the omission of these limitations in claims 1 and 3 of the instant application is an obvious expedient since the remaining limitations in claims 7, 8, 9, 12,

Art Unit: 2113

14, and 16 of the copending application perform the same function as the limitations in claims 1 and 3 of the instant application (*In re Karlson*, 136 USPQ 184 (CCPA 1963)).

Page 4

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-15 and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al., U.S. Patent 5,850,388.

Referring to claim 1:

- a. In column 8, lines 43-52, Anderson et al. disclose a protocol analyzer instrument (positioning an analyzer in communication with the network).
- b. In column 9, lines 16-21, Anderson et al. disclose that data-bearing frames are transmitted over the network and are received and analyzed by Embedded Code executed by a Protocol Analyzer Instrument using one or more RISC processors and hard-wired analyzer circuits within the Protocol Analyzer Instrument (capturing a data trace of the network with the analyzer).
- c. In column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer

instrument (determining a network device topology from a first processing of the data trace, building user layer protocols using a second processing of the data trace and the determined device topology).

- d. In column 12, lines 7-15, Anderson et al. disclose updating the error_statistics subarray of the entry in the station list array corresponding to the source address. The error_statistics array variable is actually a subarray whose length depends upon the number of types of errors detected for the particular network topology. It contains the error_id and the number_of errors for each type of error detected for the corresponding station (determining errors in the network device topology using protocol experts applied to the user layer protocols in conjunction with the determined device topology).
- e. In column 23, lines 58-67, Anderson et al. disclose displaying at least one of the device topology and the determined errors to a user.

Referring to claim 2, in column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer instrument (wherein capturing the trace data comprises capturing and storing trace data for a first channel and a second channel of the analyzer, the data for the first and second channels being stored independently).

Referring to claims 3 and 18, in column 16, lines 59-63, Anderson et al. disclose that the distribution and percentage distribution of the various protocols present in data frames are hereinafter referred to as "protocol distribution". The calculation of protocol

Art Unit: 2113

distribution is performed by the embedded code executed by the protocol analyzer instrument (wherein building the user layer protocols comprises: a) stripping a specific protocol layer from a data sample; b) sending the specific protocol layer from the data sample to a software expert configured to analyze the specific protocol layer; and c) repeating steps (a) and (b) until each protocol layer of the data sample has been processed by a designated software expert).

Referring to claim 4, in column 1, lines 34-47, Anderson et al. disclose different network topologies that are monitored (wherein determining the network device topology comprises analyzing channelized captured trace data to extrapolate information indicative of loops, switches, and switched loops).

Referring to claim 5, in column 10, lines 60-65, Anderson et al. teach wherein determining errors further comprises determining warnings.

Referring to claim 6, in column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer instrument (wherein determining errors further comprises determining at least one performance metric related to the determined topology and the specific user layer protocol).

Referring to claims 7 and 20, in column 23, lines 7-9, Anderson et al. disclose that the user can select how often network information is updated, i.e. how often the UI requests updates from the embedded code on these parameters (wherein displaying at least one of the device topology and the determined errors to a user comprises

displaying a graphical user interface (GUI) to the user, wherein the GUI is configured to receive input from the user to adjust a processing window in the data trace).

Referring to claim 8, in Figure 21, Anderson et al. teach displaying the determined network device topology.

Referring to claim 9, in Figures 18-21, Anderson et al. disclose displaying at least one of an error log, a metrics graph view, and a report view.

Referring to claim 10:

- a. In column 7, lines 60-65, Anderson et al. disclose that the present invention may comprise a plurality of protocol analyzer instruments, each having a RISC processor and each monitoring a different segment of a network or monitoring the same network or segment but at a different port or station on the network (collecting a plurality of data traces from the data network with a plurality of network analyzers).
- b. In column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer instrument (determining a topology of the data network via analysis of a combination of the plurality of data traces).
- c. In column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer

Art Unit: 2113

instrument (processing the combination of the plurality of data traces in conjunction with the determined topology to rebuild user layer protocols).

- d. In column 12, lines 7-15, Anderson et al. disclose updating the error_statistics subarray of the entry in the station list array corresponding to the source address. The error_statistics array variable is actually a subarray whose length depends upon the number of types of errors detected for the particular network topology. It contains the error_id and the number_of errors for each type of error detected for the corresponding station (processing individual protocols to determine errors, warnings, and metrics for the particular protocol).
- e. In Figures 18-21, Anderson et al. disclose displaying the errors, warnings, and metrics to the user via a graphical interface.

Referring to claim 11, in column 7, lines 60-65, Anderson et al. disclose that the present invention may comprise a plurality of protocol analyzer instruments, each having a RISC processor and each monitoring a different segment of a network or monitoring the same network or segment but at a different port or station on the network (wherein collecting data traces further comprises selectively positioning the plurality of analyzers to capture data traveling between targets and initiators).

Referring to claim 12, in column 12, lines 7-15, Anderson et al. disclose updating the error_statistics subarray of the entry in the station list array corresponding to the source address. The error_statistics array variable is actually a subarray whose length depends upon the number of types of errors detected for the particular network topology. It contains the error_id and the number of errors for each type of error

detected for the corresponding station (wherein determining topology comprises stepping through channelized data stored from the plurality of data traces to extrapolate information therefrom that indicates the presence of specific network devices).

Referring to claim 13, in column 5, lines 35-44, Anderson et al. teach wherein processing to rebuild user layer protocols comprises stripping each protocol layer from a data sample, analyzing the stripped protocol layer with an expert configured to analyze the stripped protocol layer, and sending the remaining portions of the data sample to additional protocol experts for analysis and forwarding of the data sample until each layer of the data sample has been analyzed by an appropriate protocol layer expert.

Referring to claims 14 and 19, in column 5, lines 9-13, Anderson et al. disclose monitoring in real time one or more selected and assorted network parameters and comparing the results of said analysis with arbitrary threshold values for said parameters to determine if the transmission on the network is exceeding said threshold so as to constitute an event (wherein processing individual protocols to determine errors for the particular protocol further comprises comparing protocol specific commands to protocol standards to determine if an error has occurred).

Referring to claim 15, in Figures 18-21, Anderson et al. disclose displaying at least one of a graphical metric view, a topology view, and an error log view to a user.

Referring to claim 17:

a. In column 9, lines 16-21, Anderson et al. disclose that data-bearing frames are transmitted over the network and are received and analyzed by Embedded Code executed by a Protocol Analyzer Instrument using one or more RISC

Instrument (capturing at least one bidirectional data trace from the network).

b. In column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer instrument (analyzing the bidirectional data trace to extrapolate information

indicative of network topology and analyzing individual data samples from the

data trace using the network topology to rebuild user layer protocols for the

individual data sample).

c. In column 12, lines 7-15, Anderson et al. disclose updating the error_statistics subarray of the entry in the station list array corresponding to the source address. The error_statistics array variable is actually a subarray whose length depends upon the number of types of errors detected for the particular network topology. It contains the error_id and the number_of errors for each type of error detected for the corresponding station (determining errors in the network using the network topology, the user layer protocols, and standards for the particular user layer protocols).

Referring to claim 21, in Figures 18 and 19 A-C, Anderson et al. disclose calculating and displaying network performance metrics to the user.

Application/Control Number: 10/661,200 Page 11

Art Unit: 2113

Allowable Subject Matter

6. Claims 16 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited prior art is related to network protocol analyzers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Maskulinski whose telephone number is (571) 272-3649. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W. Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2113

Page 12

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael C Maskulinski

Examiner Art Unit 2113